# DOE - Medical and Infectious Disease Update - Wednesday, March 24, 2004

DOE weekly updates on Bird Flu, Human Influenza, West Nile Virus, or other illnesses and medical issues will continue as appropriate or as requested. The following information is current as of Thursday, March 25, 2004, 0700 hours, EST. Information presented is routinely taken from the Centers for Disease Control and Prevention (CDC), <a href="http://www.cdc.gov/">http://www.cdc.gov/</a>, The World Health Organization (WHO), <a href="http://www.who.int/en/">http://www.who.int/en/</a>, the Department of Defense Global Emerging Infections Surveillance and Response System site, (DoD-GEIS) - <a href="http://www.geis.ha.osd.mil/">http://www.geis.ha.osd.mil/</a>, and other creditable sources.

## **Recent News**

<u>ALLERGY</u>-<u>The Accuweather page</u> provides current air quality information with specific charts for <u>Grass Pollen</u>, <u>Overall Pollen</u>, <u>Ragweed Pollen</u>, and <u>Tree Pollen</u> ...

http://wwwa.accuweather.com/adcbin/public/maps\_index.asp?type=airq.

## As TB Cases Rise, So Does Treatment, WHO Reports - 24March2004,

By David Brown, Washington Post Staff Writer --Tuberculosis is on the rise around the world, fueled by poverty, the AIDS pandemic and human migration. At the same time, however, more people than ever have access to treatment capable of curing the infection, one of the world's leading killers. That was the good news/bad news message of a huge report released yesterday by the World Health Organization ... http://www.washingtonpost.com/wp-dyn/articles/A19113-2004Mar23.html.

Artificial Prions Created – 23March2004, Science Daily -- The culprit behind mad cow disease, a.k.a. bovine spongiform encephalopathy, is the most infamous mammalian form of prions. Prions are misfolded proteins that are capable of growing, replicating, and being passed on to daughter cells - that is, they are by themselves heritable. Beyond their disease manifestation, prions also occur naturally in some organisms (such as yeast) and may play important roles in their growth and development. Now, Osherovich and colleagues have identified the amino acid sequences that allow prions to aggregate and replicate - and thereby pass through generations of cells - and prove this by designing an artificial yeast prion that does not exist in nature ...

http://www.sciencedaily.com/releases/2004/03/040323070139.htm.

# **Uf Researchers Use Adult Stem Cells to Produce Insulin**

22March2004, By Diane Chun, New York Times Syndicate -- University of Florida stem cell researchers appear to have been successful in treating diabetes in mice by chemically coaxing bone marrow stem cells to produce insulin. The findings may one day help doctors combat type 1 diabetes in people, according to Bryon Petersen, an assistant professor of pathology, immunology and laboratory medicine at UF's College of Medicine. But crucial questions about the treatment's potential may take another decade to answer. "This is a preliminary study conducted in animals with diabetes," Petersen said. "But I think it's a very profound study, since it shows that adult stem cell plasticity still exists and that if we understand how we can get a cell to differentiate, we can actually teach an old dog some new tricks." The findings were reported Monday in the online edition of the journal Laboratory Investigation ... <a href="https://www.nlm.nih.gov/medlineplus/news/fullstory\_16708.html">https://www.nlm.nih.gov/medlineplus/news/fullstory\_16708.html</a>.

# Moderate drinking eases blood pressure - 19March2004, BOSTON, (United Press International via COMTEX) -- U.S. researchers have found that having up to two drinks a day can help men with high blood pressure reduce their risk of death from heart disease ... After following all the subjects for five years, the researchers found that, compared with nondrinkers, weekly and daily drinkers had demonstrated a 39 percent and a 44 percent decrease, respectively, in risk of death due to cardiovascular disease ... http://www.nlm.nih.gov/medlineplus/news/fullstory\_16683.html

Are Biotech Foods Safe to Eat? - 19March2004, *By Cherie Berkley, MS*, WebMD -- Genetically modified food has quietly become second nature in the U.S., and it may surprise you just how many foods you are eating that you never knew contained a genetically modified ingredient. Experts say 60% to 70% of processed foods on U.S. grocery shelves have genetically modified ingredients ... http://dailynews.att.net/cgi-bin/health?e=pub&dt=040319&cat=men&st=men90064&src=webmd.

**Bird Flu 2003-2004: Doe Special Medical Update** – With information from WHO and the CDC, this update also explains the concepts of viral infection, viral replication, antigenic "drift", and antigenic "shift" ... http://www.eh.doe.gov/health/news/BIRDFLU2003-2004\_DOESPECIALUPDATE\_B200402091.pdf (PDF) or for a choice of PDF or Word format, http://www.eh.doe.gov/health/index.html, and scroll down under "News and Features".

WHO: Avian influenza-fact sheet – 5January2004-Avian influenza ("bird flu") and the significance of its transmission to humans ... <a href="http://www.who.int/csr/don/2004\_01\_15/en/">http://www.who.int/csr/don/2004\_01\_15/en/</a>.

CDC West Nile Virus Home - http://www.cdc.gov/ncidod/dvbid/westnile/index.htm

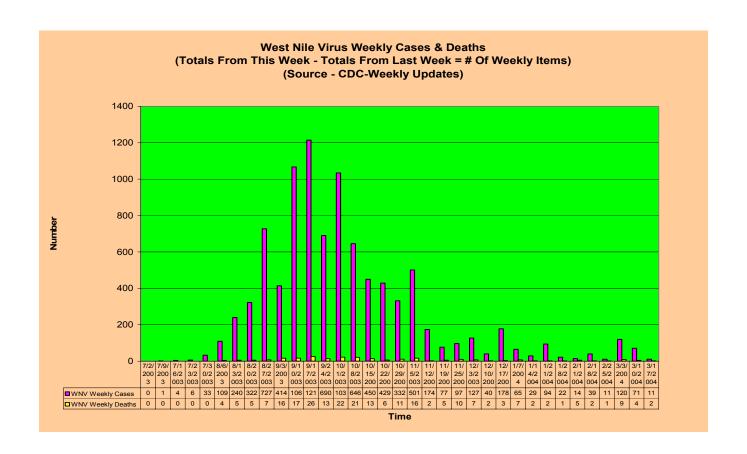
## **Links to State and Local Government West Nile Virus Web Sites**

Click on a state to link directly to their West Nile virus Web page. See the list below for additional city-level and main State Health Department Web sites ... http://www.cdc.gov/ncidod/dvbid/westnile/city\_states.htm.



**West Nile Virus Interactive Map** – If you go to this map, each State will be 'HOT', and clicking your mouse on a State will link you to its Health Department's West Nile web site and bring up other information. Whereas the CDC map and case summary is a lagging indicator, this map, linked to each State's Health Department, provides real-time information for those states which update regularly, such as PA and CO ... <a href="http://www.mosquitoczar.com/west\_nile\_virus">http://www.mosquitoczar.com/west\_nile\_virus</a>.

CDC West Nile Virus Case Count - Maps reporting WNV activity and human disease cases reported to CDC were updated on March 19, 2004 and provide weekly information thru March 17, 2004. See the chart below. Total cases and deaths from 46 states stand at 9388 and 246, respectively ... http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount03.htm.



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